

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A method for modeling different internal structures of a second head, ~~such as different parts of the brain, in order~~ to focus magnetic stimulation and/or visualize the results of magnetic stimulation, MEG or EEG, the method comprising the step of:

a) determining the location of the at least one internal structures, such as the ~~different cerebral parts, of at least one within a~~ first head (B) in a three-dimensional space by technical means, e.g., magnetic resonance imaging or computer-aided tomography,

~~characterized in that~~

b) determining the external dimensions of at least one ~~a~~ second head (A) are determined, and

c) scaling the location data of said internal structures of said first head (B) are scaled in a three-dimensional space to correlate with said external dimensions of said second head (A), to define the locations of the at least one internal structure in said second head; whereby the location data of the internal structures of said second head (A) ~~also~~ become modeled without the need for anatomical images of said second head (A).

2. (Currently amended) The method of claim 1, ~~characterized in that~~ wherein the method is utilized in the focusing of magnetic stimulation and/or visualization of results obtained by magnetic stimulation, MEG or EEG.

3. (Currently amended) The method of ~~any one of foregoing claims~~ claim 1, ~~characterized in that~~ wherein said location data is displayed in an image format and the scaling thereof in step c) is implemented by mutual moving of individual pixels.

4. (Currently amended) The method of ~~any one of foregoing claims~~ claim 1, ~~characterized in that~~ wherein the response recorded by MEG or EEG or, alternatively, the effective stimulating field of TMS is localized in relation to anatomical marker points determined on the head surface.

5. (Currently amended) The method of ~~any one of foregoing claims~~claim 1, ~~characterized in that~~wherein said step b) of determining the measurement system of the external head dimensions is based on~~performed by using the use of~~ infrared light, electromagnetic fields, laser light or a pointer equipped with electrical position sensor means.

6. (Currently amended) The method of ~~any one of foregoing claims~~claim 1, ~~characterized in that~~wherein said step a) of determining uses the internal structures of a plurality of heads of persons of substantially the same age;

said step c) of scaling uses an~~the~~ image scaling algorithm and includes adjusting an~~optional scaling facility that in the scaled set of superposed images adjusts the distance from the cortex to the scalp to a value typical for the persons of substantially~~ being examined ~~in a cohort of persons of the same age.~~

7. (Currently amended) The method of ~~any one of foregoing claims~~claim 1, ~~characterized in that, in addition to head surface marker points or in lieu thereof,~~wherein the step c) of scaling performs a deformation operation is carried out utilizing the location data of such functional points of the brain that, without using magnetic resonance imaging, can instead be~~are~~ localized solely with the help of magnetic stimulation, MEG or EEG, as functional points of the brain.

8. (Currently amended) The method of ~~any one of foregoing claims~~claim 1, ~~characterized in that~~wherein said step of scaling performs the image deformation is performed using a minimizing algorithm that minimizes the mutual distances between the respective points of the deformed image of the second head (A) and the points measured on the surface of a first~~second person's head (B).~~

9. (Currently amended) The method of ~~any one of foregoing claims~~claim 8, ~~characterized in that~~wherein the computation results of the minimization algorithm are accepted even when the mutual distances between respective image points are not reduced to zero.

10. (Currently amended) The method of ~~any one of foregoing claims~~claim 1, ~~characterized in that~~wherein the method is utilized for visualizing in a layman fashion the results of TMS, EEG or MEG examinations performed on a patient having no magnetic resonance images of his/her head available.

11. (Currently amended) The method of ~~any one of foregoing claims~~claim 1, ~~characterized in that~~wherein the method is utilized in the display of results in a single set of MR images obtained from measurements performed on a plurality of test persons.

12. (Currently amended) The method of ~~any one of foregoing claims~~claim 1, ~~characterized in that~~wherein the ~~standard~~first head used in the method is selected from a library of plural magnetic resonance images taken from a plurality of persons representing heads of different types and shapes.

13. (Currently amended) The method of ~~any one of foregoing claims~~claim 1, ~~characterized in that~~wherein linear scaling is used in the method.

14. (Currently amended) The method of ~~any one of foregoing claims~~claim 1, ~~characterized in that~~wherein nonlinear scaling is used in the method.

15. (New) The method of claim 1, wherein the method further comprises d) obtaining a three-dimensional image from magnetic resonance imaging or computer-aided tomography of the first head.

16. (New) The method of claim 1 wherein the step b) only determines the external dimensions of the second head without directly determining the location of internal structures in three dimensional space.

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17. (New) The method of claim 16 wherein the step b) is performed without sending of internal structures by MRI or the like.